



SEQUENCE LISTING

<110> YE, Jane et al.

<120> ISOLATED HUMAN RAS-LIKE PROTEINS,
NUCLEIC ACID MOLECULES ENCODING THESE HUMAN RAS-LIKE
PROTEINS, AND USES THEREOF

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<141> 2001-03-27

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APR 16 2003

TECH CENTER 1600/2900

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ttggccatta tccttctacc ctgattgcc a gctcttctca gagtgccttc ttctgtaate 600
c 601

<210> 17
<211> 601
<212> DNA
<213> Homo sapiens

<400> 17
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gagaacacct ccagtggggc tgctactctt cagccttgcg ggggccagct ggagtggcca 180
caccatggtc acaccagctg aagttcaaga agcccttgc caggagattg ctttgctggc 240
tctgggtgag ggcaggtgca tctggaagcc ccttcttttc taagatgttt gctcctgagt 300
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gagaaggagg ctggaggagt gagtgggtcag tagcctgggtg ggtcctggct gcctctgtgg 420
tgcccgtgg cctaagtagc aggcttaggg aggcgagacc cagttccagg ggctgccaat 480
ggggagcgag atgggggtggc tggagcacac tgcacatgtc accaaggctc tagggaggtc 540
tgtgcacaag gcagtgggaa aagcaagggg aagaccagc ctgggtcaaca tgggtgaaacc 600
c 601

<210> 18
<211> 601
<212> DNA
<213> Homo sapiens

<400> 18
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accacagga ggtgcacatg gccacacat gctggtttcc tgcagtggga ggggctgggg 180
cactcctggg acctgtgctt ggtaactgga gctggcctgg ccctggggat tgggtgtctg 240
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ytcaggtcgc actgctggtc ctttgggctg tggttgatcc tggtgataac atttggcacc 360
cagaggcagc cctgtttcca ctgaagcatg cggagcttgg ctggcaggca ggcaagctgg 420
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attgaggttg tagccagact ccaggagcca tctgggcccc acagggggcg gcatttcttc 540
tttttgttga aacattccag ccaagtgtct gcttgggctt catctctctg tcccactctc 600
c 601

<210> 19
<211> 601
<212> DNA
<213> Homo sapiens

<400> 19
ccctgtgtta tgggttttac accttatctc acaatcttaa aaaaaaatt ctctgagaat 60

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cccaacacca tgcaggtaat tagtgataaa ggcagggttg gaaccaaact tgacctccca 180
attgtgctct taatggccag gacactctgt gtcttgagcc acacttcctc catgttttct 240
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ctgcctgct gcatccctct atcctgccc tgccccgggt gccagagga gggccctgcc 480
tgtcttccca gttctccaac agcagcgctg tcccagcacc ctcggtctcc agttgtggcc 540
tggcagctgc tggggcagac accatacaga cagagtcaca gcaggaagag gatggggccc 600
a 601

```

```

<210> 20
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 20
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ctagcttagg agtcacgtga gtgctgggtg tctgcctgc tgcacctc tatcctgcc 180
ctgcccccg tgccagagg agggccctgc ctgtcttccc agttctccaa cagcagcgt 240
gtcccagcac cctcgggctc cagtgtgtgg ctggcagctg ctggggcaga caccatacag 300
mcagagtcac agcaggaaga ggatggggcc cagggtgct gcctcaggcc atggctgcat 360
ggcaccatca gttgattgag gagcttttct tgccaatgtc tgaggcatca ggtggcagga 420
cacgtctccc tgctcttaag cctcaggcat gcagcccttc ttatgctctc tggggtgagg 480
gggagatccc cctcatggaa ttgctttttt tttttttttt ttttttttga gacagggtcc 540
tgctctgtca ctcaggctgg agtgcagcct caacctccca gactcaagtg atcctcctgc 600
c 601

```

```

<210> 21
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> variation
<222> (301)...(301)
<223> 't' may be either present or absent

```

```

<400> 21
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gggcagacac catacagaca gagtcacagc aggaagagga tggggcccag ggctgctgcc 120
tcaggccatg gctgcatggc accatcagtt gattgaggag ctttcttgc caatgtctga 180
ggcatcaggt ggcaggacac gtctccctgc tcttaagcct caggcatgca gcccttctta 240
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tcaagtgatc ctctgcctc agcctccga gtagctggga ccacaggtgg acaccatcac 420
acctgggttt ttttgttttt tgttttttgt tttctagaga tggggtctca ctttcttgct 480
cagtctggtc tcgaactcct gggcgcaagc agtctccca cctcgtcttc ccaaagtgtt 540
tggattacag gtgtgagcca ctgtgcttgg cttttttatt tatttagaat ttgttttgga 600
a 601

```

```

<210> 22
<211> 601
<212> DNA
<213> Homo sapiens

```


<400> 22
ggatgtttct tccatgacat atatagctct tgaaactact tctatctaata atcaccacaca 60
gtgctgttaa aaatacacagat ttctgggcct caccctcaaa ttatgattca gtaggtctag 120
gcacgtcaag gtcattgttt ttgtctttgt ttttaagtcac cccaggtgat tctaaagccg 180
aagctctgca aagcacacct tgagaaacag agaactcttg tgctctcgct ctcttgacac 240
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ygtgagagct tattgaaact gattgcgga ccccatacct agagggcctg attctatagg 360
tctgaggtaa ggccaagaa tttgcatatt tgcatttcgt tttcttttcc tttcttttct 420
tttttttttt ttttgagatg aagtctcacc ctgtcgccca gactggagtg cagtggcatg 480
atctcagctc actgcagcct ctgcctcctg gggttaaagcg attctcccca caccacagac 540
ccgctcctga gtagctggga ttacaggtgc ccgccaccat gactagctaa cgtttgtatt 600
t 601

<210> 23
<211> 601
<212> DNA
<213> Homo sapiens

<400> 23
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cgaagctctg caaagcacac cttagaaaac agagaactct tgtgctctcg ctctcttgac 120
acttcaggtg caaaactttt gtcttaattgt cgttctcaaa cttacgcatg tgtgagaatc 180
actgtgagag cttattgaaa ctgattgctg gaccccatat ctagagggcc tgattctata 240
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yttttttttt ttttttgaga tgaagtctca cctgtctgcc cagactggag tgcagtggca 360
tgatctcagc tcactgcagc ctctgcctcc tgggttaaag cgattctccc cacaccccag 420
accgctcct gagtagctgg gattacaggt gccgcacc atgactagct aacgtttgta 480
tttttagtag agacgggggt ttcacatgt tggccaggct ggtctcaaac tcctgacctc 540
aggtgatcca ctacactcag cctcccaagg tcttgggatt actggtgtga gccaccgcgt 600
g 601

<210> 24
<211> 601
<212> DNA
<213> Homo sapiens

<400> 24
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cgtgattctc atgcacctgg aagtttgaga aatatgacct tagaggagcc ggaatgtgaa 480
accactggag gcagagatag atggagaata tctcttcttc tcacggatac taaagatgca 540
acaaaaaggg ctgactctct ggggtgtgcac ccaggtgggg ctgatgaccg aaaagaggcc 600
a 601

<210> 25
<211> 601
<212> DNA
<213> Homo sapiens

<400> 25
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catagctaag aagtgagggg ggaggtgaga aggagtcact gccagcctc acttccgggt 120

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gagtaccctg tctccttgtc agttctgtct ctggggacag ttgcctgctt tcacctctcc 180
ctccatcccc tcttctctca cagggaacaa ttcaccttaa tattggaagt tcctctccta 240
gcaaagtcct tctcaggcac ccacaggcaa aaaggaaact aagcagagtt agggcttcca 300
kgcctagcca actacacgac tctcctcttg cttccctaag aaccagcgca aggggcagcg 360
tgggttccag catagatgga cctgtgttgg aatctctgca cgtgctgtgc tgacctggc 420
tagccattga cctctctgag cccttgtttc ctttccacta ggctctctga gggcaggggc 480
catgtctttt tcaactgctct gtctgcaact agcactgtgc agggcacata ggaagttccc 540
ataaatgttt gtgggataaa ggaaataaaa ccttctctct tcctgtcccc cttgtgatgg 600
c
601

```

<210> 26
<211> 601
<212> DNA
<213> Homo sapiens

```

<400> 26
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cctagccaac tacacgactc tcctcttgct tccctaagaa ccagcgcaag gggcagcggtg 120
ggttccagca tagatggacc tgtgttggaa tctctgcacg tgctgtgctg accctggcta 180
gccattgacc tctctgagcc cttgtttcct ttccactagg ctctctgagg gcaggggcca 240
tgtctttttc actgctctgt ctgcaactgag cactgtgcag ggcacatagg aagttcccat 300
raatgtttgt gggataaagg aaataaaaacc ttctctcttc ctgtccccct tgtgatggct 360
ttgcacaagg cactgtcctt ggccagggtt gctaggctag tgtgaggata aaccagggtat 420
attacaaatt ggagaaaatt tctcgttctt cttggaagaa ggtgctgtat catgaaacaa 480
gaatgtcttg attcccttct atgccaggta ctggggagaa acaggtgcct gataaccgtt 540
gatccaggca gaaataagca tactcctgct tcccaaggcc tgatgcttct ctccttcttc 600
c
601

```

<210> 27
<211> 601
<212> DNA
<213> Homo sapiens

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<400> 27
ccttgatga agaagcgtgg gaactctttg cttcctttcc ctcccgcagt gacatgccat 60
gccatgccac tgcctcttca tctggtccta tgacagtcac tcataagcac ccgcatgtac 120
ccggccctgc actagctcat gacagctgca gtcaattggg ccagggtgctg tatctcatcc 180
ggcctcctca gcaaccctct gagatactgg taatgtccct gatgaagata tttactgagg 240
cagaaatgga cgctcagtga agcaagggtc ctgatgttat agcaatgagc tatgagtggc 300
yagagggagg agataagctc aggcctgaca ccaaagccca tgctccttct agtcaaccac 360
agtgcctcct atggtgaatg agtgagtcag caaccaagac gcatgaggcc ttcttttttg 420
tgagccttgg ctgggtgctg aggccttcagg tacaatcatg ggttgaaga gccctcctct 480
ctctccacag tctggcacta tgacccttcc tggttattaa caaggcaaag agagagaggg 540
aagaaagcag gcaaataatg tgggttgcta ttccatagaga ttagaatttc aggaaggata 600
a
601

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<210> 28
<211> 601
<212> DNA
<213> Homo sapiens

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<400> 28
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tgtgtcctgc tgtgtgcagc tcgctctttc cttccttcct aagctatcca aggggatgga 120
cccaggctcg tggggagggt ccacccttgg atccaggaag aaccctccac cctgcctcgt 180
gggtgggcca aaggctacag ggtgcttctt cctcttcccc caccctccact gtccctcatg 240
tgccatgggc ctgcctcccc agtgacctgc gaaagtggag catcgaggta ggagggaaac 300

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```

rgcaaccagg gagtcctcga gcctggggct gccctacctc taccatttcc cgcaccagag 360
ctttgccctt gcttggtctgc ccgcctgcct ctttggggaa ctgagctcag aggcagggtgc 420
ttcagagaag gaaacaaaat gaggggtggc agggataaaa agtcacctcc atttcttacc 480
tcccatgcag catgaacaca atttctctcc acctggctcc caaattttaa gatgtggacc 540
aaggcctgtg ggtactccag gggcaaggag agccctgggg tcagtgcacac tgtcaggcca 600
a 601

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<210> 29

<211> 601

<212> DNA

<213> Homo sapiens

<400> 29

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tcgtggggag gttccaccct tggatccagg aagaacctc caccctgcct cgtgggtggg 180
ccaaaggcta cagggtgctt cttcctcttc cccaccccc actgtccctc atgtgccatg 240
ggcctgcctc ccagtgacc tgcgaaagt gagcatcgag gtaggaggga aacggcaacc 300
rgggagtcct cgagcctggg gctgccctac ctctacccat tccccgacca gagctttgcc 360
cttgcttggc tgccgcctg cctctttggg gaactgagct cagaggcagg tgcttcagag 420
aaggaaacaa aatgaggggt ggcagggata aaaagtcacc tccattctct acctcccatg 480
cagcatgaac acaatttctc tccacctggc tcccaaattt aaagatgtgg accaaggcct 540
gtgggtactc caggggcaag gagagccctg gggtcagtga cactgtcagg ccaaccatgc 600
a 601

```

<210> 30

<211> 601

<212> DNA

<213> Homo sapiens

<400> 30

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agaaggacta ttttgtact gtaccctagg ggttctggaa gggaaaacat ggaatcagga 180
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aaggagaatt gggatttttag ggtgcagcta cgctcaccct aaacttttgg tggcctgggg 300
yatgtcttga ggcccagact gttaaccagg ctctgctggc ctgtttactc gtcaccacct 360
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cactatctcc ctgtgacggg tgaacttcgt gtactgtgtc tcgggtccat atatgaattg 480
tgagcagggt tcatctattt taaacacaga tgtttacaaa ataaagatta tttcaaacca 540
ccggtgtggc tgccctggatg agtccttggg ggtaggtctc actcagacct tggcagtgat 600
g 601

```

<210> 31

<211> 601

<212> DNA

<213> Homo sapiens

<400> 31

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ggcagtggtc ccaatctgtg gaccagtatt tcagctttcc ctgaagatca ggcaggggtgc 60
cattcattgt ctttctctcc tagccccctc aggaagaag gactatattt gtactgtacc 120
ctaggggttc tggaaggga aacatggaat caggattcta tagactgata ggccctatcc 180
acaagggcc aaggtatggg agcagaagga gaattgggat ttaggggtgc 240
agctacgctc accctaaact tttggtggcc tggggcatgt cttgaggccc agactgttaa 300
scaggctctg ctggcctgtt tactcgtcac cacctctgca cctgctgtct tgagactcca 360
tccagcccca ggcacgccac ctgctcctga gcctccacta tctccctgtg acgggtgaac 420
ttcgtgtact gtgtctcggg tccatatatg aattgtgagc agggttcatc tattttaaac 480

```

```

acagatgttt acaaaataaa gattatttca aaccaccggt gtggctgcct ggatgagtc 540
ttgggggtag gtctcactca gaccctggca gtgatgtggg agggagagag gcagtgtctg 600
t                                                                 601

```

```

<210> 32
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 32
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ccaggcacgc cacctgctcc tgagcctcca ctatctccct gtgacgggtg aacttcgtgt 120
actgtgtctc ggggtccatat atgaattgtg agcagggttc atctatttta aacacagatg 180
tttacaaaat aaagattatt tcaaaccacc ggtgtggctg cctggatgag tccttggggg 240
taggtctcac tcagaccctg gcagtgatgt gggagggaga gaggcagtgc tggtagaagc 300
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ccttctctac cttccctagt gccacctgca gggaggccca aagcaaagcc ccgttgcctc 420
gcattgggct ggcactgcag aaataagatg aaacacagtt atcgagagga tgctgaacat 480
ctatgagcag gttttaaagc caagatgagt ctcactctgt tgtgtgggtc aggaacgggt 540
cttcctgaag gcatgagggt ggactggata atctttcaga tttgtgattg gataacctcg 600
g                                                                 601

```

```

<210> 33
<211> 601
<212> DNA
<213> Homo sapiens

```

```

<400> 33
gcacgccacc tgctcctgag cctccactat ctccctgtga cgggtgaact tcgtgtactg 60
tgtctcgggt ccatatatga attgtgagca gggttcatct attttaaaca cagatgttta 120
caaaataaag attatttcaa accaccggtg tggctgcctg gatgagtcct tgggggtagg 180
tctcactcag accctggcag tgatgtggga gggagagagg cagtgtctgt agaagcagct 240
ccagaagcaa aggcaacagc agtagagtga ccacggaagc ggcaaacatt gtcttccctt 300
stctaccttc cctagtgcc cctgcaggga ggcccaaagc aaagccccgt tgccttgcct 360
tggtgtggca ctgcagaaat aagatgaaac acagttatcg agaggatgct gaacatctat 420
gagcagggtt taaagccaag atgagtctca tctgtttgtg tgggtcagga acgggtcttc 480
ctgaaggcat gaggtgggac tggataatct ttcagatttg tgattggata cctcggggga 540
gcagaggcag actgggatct caggactgca ggtatttcat actttgggat atggaattga 600
t                                                                 601

```